AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/616,227

Attorney Docket No.: Q76484

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (canceled).

2. (currently amended): A laser apparatus according to claim 17, wherein said lens-

setting surface has a flatness not greater than 0.5 micrometers.

3. (currently amended): A laser apparatus according to claim 17, wherein said

block has a laser fixation surface on which said plurality of laser diodes are fixed, and the laser

fixation surface has a flatness not greater than 0.5 micrometers.

4. (withdrawn and currently amended): A laser apparatus according to claim 17,

wherein said plurality of laser diodes are realized by a multicavity laser-diode chip having a

plurality of light-emission points.

5. (withdrawn and currently amended): A laser apparatus according to claim 1.7,

wherein said plurality of laser diodes are realized by a plurality of multicavity laser-diode chips

each having a plurality of light-emission points.

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6. (currently amended): A laser apparatus according to claim-1.7, wherein said plurality of laser diodes are realized by a plurality of single-cavity laser-diode chips each having a single light-emission point.

7. (currently amended): A laser apparatus—according to claim 1 comprising: a block;

a plurality of laser diodes respectively having light-emission points and being fixed to said block so that the light-emission points are aligned along a direction; and

a collimator-lens array integrally formed to contain a plurality of collimator lenses which are arranged along a direction and respectively collimate laser beams emitted from said plurality of laser diodes;

wherein said block has a lens-setting surface which is flat, perpendicular to optical axes of said plurality of laser diodes, and located on a forward side of said plurality of laser diodes at a predetermined distance greater than zero along said optical axes from said light-emission points, and said collimator-lens array is fixed to said block so that an area of an end surface of said collimator-lens array is in contact with and overlaps an area of said lens-setting surface at only outer sides of said block with respect to a widthwise direction of said block,

wherein each of said plurality of laser diodes is realized by a nitride-based compound laser-diode chip,

wherein said block is a heat-dissipation block made of copper or copper alloy,

wherein said laser apparatus further comprising comprises a plurality of submounts

which are made of a material having a thermal expansion coefficient of 3.5 to 6.0 X 10-6/°C,

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have a thickness of 200 to 400 micrometers, and are separately formed on said heat-dissipation

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block,

wherein each of said plurality of laser diodes and said plurality of submounts has a

bonding surface, and

wherein each of said plurality of laser diodes is junction-side-down mounted on one of

said plurality of submounts in such a manner that the bonding surface of said each of the

plurality of laser diodes is bonded to the bonding surface of said one of the plurality of

submounts through a metalization layer and an Au-Sn eutectic solder layer each of which is

divided into a plurality of areas.

8. (original): A laser apparatus according to claim 7, wherein each of said plurality of

laser diodes contains a light emission region, and said metalization layer and said Au-Sn eutectic

solder layer are separated by a groove which is arranged immediately below the light emission

region.

9. (original): A laser apparatus according to claim 7, wherein said plurality of

submounts are made of AlN.

10. (original): A laser apparatus according to claim 7, wherein said plurality of

submounts are bonded to the heat-dissipation block with Au-Sn eutectic solder.

11-29. (canceled).

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